THE RECOVERY KERNEL

How to Navigate the Recovery Kernel

For People Recovering from Crack Cocaine

Smoked cocaine (crack, freebase, rock). A step-by-step route: what to read, in what order, and what outcome the Kernel projects if you follow it.

> **HARM REDUCTION RESOURCE — NOT MEDICAL ADVICE. CRACK COCAINE CAUSES CARDIAC AND PULMONARY EMERGENCIES AT ANY AGE.** Call 911 for chest pressure, tightness, or pain; jaw, left-arm, or back pain; a sudden severe pounding heartbeat with dizziness or near-fainting; a sudden severe headache; coughing up blood or dark-brown sputum; severe shortness of breath at rest; bluish lips or fingernails; sudden sharp one-sided chest pain; a very hot, flushed body that has stopped sweating; a seizure; or severe paranoia and agitation. Do not wait to see if it passes. There is no reversal agent for cocaine emergencies: care is supportive.
>
> Never combine crack with alcohol (it forms cocaethylene, which is more cardiotoxic than either alone). A stimulant can mask opioid sedation, and fentanyl has been found in the crack supply, so carry naloxone.
>
> Crisis: call or text 988 · SAMHSA: 1-800-662-4357 · Never Use Alone: 1-800-484-3731

1. Before you start

This is a route through the Recovery Kernel for people recovering from crack cocaine, and for the people supporting them. The pharmacology is the same molecule as powder cocaine. What changes is the route, and the Kernel says that one variable changes everything: smoked crack reaches the brain in seconds, peaks in a 10 to 20 second rush, and lasts 10 to 15 minutes. That produces the most compulsive binge pattern, the deepest crash, and the most cue-driven craving in the stimulant category. This guide builds on the cocaine guide (Supplemental Ch. 12) and adds what is specific to crack. Six rules set the order of everything that follows.

- **Heart and lungs first.** Every hit is a cardiovascular event and passes through the lungs. Crack lung, bronchospasm, and pneumothorax are specific to smoking. The medical assessment belongs in the first week.
- **Never mix, and carry naloxone.** Alcohol makes it more toxic, and opioids and benzodiazepines can be hidden by the stimulant.
- **The craving is a memory of a specific event.** It is not a vague urge. It is the brain predicting the rush, so the interrupt is behavioral before it is cognitive.
- **The pipe, the lighter, the corner, and the cash are all cues.** Redesign geography, cash handling, and the social scene, not just intentions.
- **The legal and economic aftermath is part of recovery.** The Kernel treats drug court, records, housing, and money as recovery work, not a separate problem.
- **Do not wait for test results to start.** The genome refines the plan (Main Book, Quick-Start Step 3; Supp. Ch. 5, Step 1b).

How chapters are cited. "Main Book" is the Recovery Kernel Main Book (Second Edition, Centurian). "Compendium" is the Complete Protocol Compendium. "Supp. Ch. N" is chapter N of the Supplemental Book. The two core chapters are Chapter 13 (How to Recover from Crack Cocaine) and Chapter 12 (How to Recover from Cocaine), which holds the full biology, genomics, and supplement detail that Chapter 13 refers back to. Section numbers (§) refer to sections inside those chapters.

> **The Kernel's framing.** Chapter 13 states its position openly, and this guide reports it as the Kernel's. The Compendium's historical timeline says drug policy criminalized crack at a 100:1 sentencing disparity against powder cocaine, that incarceration fell disproportionately on Black communities, and that treatment was absent and punishment substituted for medicine. The Fair Sentencing Act of 2010 reduced the disparity to 18:1, and the First Step Act of 2018 made that reduction retroactive for some federal convictions. The Kernel's conclusion: the dependency was biology, and what happened to many people because of it was a policy choice. So this guide carries a route for the biology and a route for the legal and economic aftermath.

> **If you are not ready to stop yet.** The Kernel does not require abstinence before offering help. Its harm-reduction points for people still smoking: use a glass pipe with a rubber or silicone mouthpiece rather than improvised metal or plastic; never share a pipe, because lip cuts and sores carry bloodborne infection risk equivalent to sharing needles; care for cracked lips; test for fentanyl with strips; never use alone; and carry naloxone. Local needle exchanges and public health programs in most large cities provide free kits, naloxone, and STI testing without judgment. (Supp. Ch. 13 §0)

> **A note on protocol numbers.** Supplemental Chapter 13 cites Compendium protocols by number, and some numbers do not match the Compendium as printed. It calls Protocol 03 "exercise" (printed: Sonic Architecture; exercise is Protocol 19), Protocol 05 "environmental redesign" covering geography, digital, and social life (printed: Digital Detox), Protocol 13 "Physician Conversation" (printed: The Pharma Trap), and Protocol 20 the identity protocol (printed: Mapping the Terrain). This guide cites each protocol by its printed title. If a number and a title disagree, follow the title.
>
> For crack, the same fast-fade pattern as cocaine applies, compressed into an even shorter window — treat the fade as the end of that use, not a restart cue.
>
> Redosing is not the only version of this. Watching peers in a treatment setting negotiate a relapse, getting confident advice from someone untrained in your specific situation, or noticing a prescriber treat a prescribed substance more casually than an illicit one can all trigger the same pattern: a felt doubt read as “the plan must be wrong,” answered by abandoning it. See **The Commandeering Map**, a companion to this series, for the fuller pattern, including how it can differ by genetic profile and what helps when practice-based resistance alone is not enough.

2. The route at a glance

Steps 0 and 1 come first. Steps 2 to 4 can run at the same time. Steps 5 to 9 overlap and are the work of the first two years. Step 10 is everything after. "P" means Compendium Protocol; "C" means Centurian Paper.

Step	When	What you do	Turn to
0	Day 0	Triage: cardiac and pulmonary emergencies, mixing, fentanyl, the crash. Harm reduction if still using.	Supp. Ch. 13 §0 Supp. Ch. 12 §0 Main Book, Quick-Start Step 1
1	Days 0–7	Medical assessment: lungs, heart, blood count, teeth, nutrition. Ride out the crash.	Supp. Ch. 13 §§3, 8.1 Supp. Ch. 12 §4.5 Compendium P01
2	Weeks 1–4	Read the Main Book in order.	Main Book: Who This Book Is For, Quick-Start, Part One (Ch. 1–5) Supp. Ch. 1, 2, 3
3	Weeks 1–4	Order 30× whole-genome sequencing. Add a clinical PGx panel and baseline labs.	Supp. Ch. 5 Step 1 Supp. Ch. 13 §2; Ch. 12 §2 Compendium P06
4	Weeks 2–6	Resolve your combined profile. Ask about ADHD.	Supp. Ch. 5 Steps 2–3, 6 Supp. Ch. 13 §2
5	Day 1 to Month 6	Build the triple foundation: dopamine, serotonin, and lungs.	Supp. Ch. 13 §4 Supp. Ch. 12 §4 Compendium P18, P17, P09, P07
6	Weeks 1–12, then ongoing	Pipe, lighter, smoke, corner, cash: redesign the cues. Learn the interrupt.	Supp. Ch. 13 §5 Compendium P05, P20, P21, P08, P33
7	Weeks 2–24	Build the Warrior's intensity architecture, financial recovery, and service.	Supp. Ch. 13 §6 Supp. Ch. 12 §6; Ch. 36 C-28; Compendium P19, P03, P29
8	From week 1	Ask about medication and ADHD treatment.	Supp. Ch. 13 §8.3 Supp. Ch. 12 §§4.4, 8 Compendium P44, P13
9	Weeks 1–12, then years	Legal aid, drug court, records, housing, work, money. Identity and family.	Supp. Ch. 13 §8.2, §8.4 Supp. Ch. 42, 43, 50, 51 Compendium P23, P24, P22
10	Year 1 to Year 10	Steward: review, transplant, guide others.	Supp. Ch. 44, 6, 38 Compendium P02, P13 Supp. Ch. 5 Step 6

3. The route, step by step

Step 0 — Triage (Day 0, before everything)

Know the emergency signs in the banner. Crack's cardiac danger is the same as powder cocaine (coronary spasm, a norepinephrine surge, and increased clotting) but amplified by the speed of delivery, and it can cause arrhythmia, heart attack, or sudden cardiac death within minutes of a single hit, at any age and with no cardiac history. The pulmonary emergencies are specific to smoking. Crack lung (diffuse alveolar hemorrhage) brings sudden severe shortness of breath, coughing blood or dark-brown sputum, fever, and chest pain, and needs 911 and hospital care. Acute bronchospasm can need emergency bronchodilators. A pneumothorax (sudden one-sided chest pain and breathlessness) needs a chest tube.

Other hazards: hyperthermia (call 911 and start cooling), seizure (recovery position, do not restrain), and cocaine psychosis (a calm, safe space, and 911 if there is a risk of violence). The crash itself is not medically dangerous in most cases, but it is the deepest in the stimulant category, and the Kernel points to 988 and a support person during it. If you have chest pain or breathing symptoms in the crash, call 911 before anything else.

Turn to: Supp. Ch. 13 §0 (the cardiac emergency; crack lung and other pulmonary emergencies; overdose in the crack context; harm reduction for active smoking). Supp. Ch. 12 §0. Main Book, Quick-Start Boot Sequence, Step 1. Compendium Protocol 01, Emergency Triage, for an acute crisis state.

Step 1 — Medical assessment and the crash (Days 0–7)

The crash timeline follows the peak: the higher the dopamine flood, the deeper the crash. Hours 0 to 4: extreme fatigue, profound depression, an overwhelming craving for the pipe, shaking, and possible paranoia. Lie down, drink water, eat if you can, and do not use. Hours 4 to 24: the hypersomnia phase, where sleep is the physiology of repair, not failure. Days 2 to 7: the vulnerable window, when receptors are still downregulated, the world is gray, and any cue from the crack context fires the rush memory at full intensity. Weeks 1 to 4: cravings triggered by cues that may seem unrelated. Months 1 to 12: episodic, mostly cue-triggered cravings, and pleasure slowly returning.

Schedule these in the first week: pulmonary function testing (spirometry), repeated at 3 and 6 months, plus a chest X-ray or CT if you have respiratory symptoms; an ECG and blood pressure check, with an echocardiogram if you had cardiac symptoms; a complete blood count for levamisole, repeated at 1 and 3 months, because crack is made from the same powder supply; a dental assessment (community health centers and dental schools offer lower-cost care); a nutritional assessment (magnesium, zinc, B vitamins, protein, vitamin C); and, if pregnancy is possible, early prenatal care. If you have a cough, shortness of breath, or you cough blood, pulmonology evaluation is urgent, not deferred. Some crack-related lung damage is reversible with cessation and some is not, and the baseline tells you which.

Turn to: Supp. Ch. 13 §3 (the crash timeline; medical assessment in early recovery) and §8.1 (medical priorities specific to crack). Supp. Ch. 12 §4.5 (physical recovery; levamisole monitoring). Compendium Protocol 01, Emergency Triage.

Step 2 — Read the Main Book (Weeks 1–4)

Read it in order once you are physically stable. If you are overwhelmed, the Quick-Start Boot Sequence is designed to be read on its own. Read "Who This Book Is — and Is Not — For" first: it names situations where the supplement protocols need medical modification, including active psychosis, pregnancy, and severe liver disease.

Read in this order: Who This Book Is For → Quick-Start Boot Sequence → Part One: Ch. 1 (Why Willpower Isn't Enough), Ch. 2 (MTHFR), Ch. 3 (COMT; the Warrior profile is cocaine's primary genomic target), Ch. 4 (CYP450), Ch. 5 (When Systems Collide) → Ch. 7 (Harm Reduction), only if you are still using → Part Two, the case files (Chapter 6). Ch. 8 (Oxytocin Protocol) is experimental and specialist-only. Ch. 9 (Epigenetic Playground) belongs to Steps 7 and 10. Appendix A and Appendix B are reference.

Then add: Supp. Ch. 1 (Why They Left You There), the Kernel's chapter on abandonment and power, which its crack chapter's own framing makes especially relevant. Supp. Ch. 2 (Clarity · Restoration · Manning), which includes Case 04, the cocaine case, and sets your expectations. Supp. Ch. 3 (The Addict Virgin Problem), which recalibrates timelines for a damaged system. Supp. Ch. 12 (Cocaine), which Chapter 13 tells you to read alongside it. For the history of how addiction was built, sold, and criminalized, the Compendium's Centurian Paper C-33 (The Archaeology of the Epidemic).

Step 3 — Get your DNA (Weeks 1–4)

The Kernel's recommended route is 30× whole-genome sequencing, which returns a VCF file, a one-time asset you keep. A consumer SNP array is an acceptable start. A clinical pharmacogenomic panel adds clinical-grade CYP calls. Homocysteine, B12, and RBC folate are functional markers you can recheck quarterly.

The panel is the cocaine panel: **COMT** Val158Met first (Val/Val, the Warrior, is the primary crack vulnerability), then **DAT1/SLC6A3**, **DRD2/ANKK1**, **SLC6A4**, **MTHFR**, **DRD4**, **BDNF**, and **CYP3A4** with CYP2D6. Until results arrive: did crack feel like the first time everything was as it should be; did you use it for focus before the dependence deepened; did the crash feel worse than from other stimulants (a pharmacokinetic consequence of the higher peak); have you had significant respiratory symptoms or a family history of cardiac disease?

> **Confirm what you are ordering.** Supp. Ch. 5 specifies 30× whole-genome sequencing with VCF output. "WGBS" more commonly names whole-genome bisulfite sequencing, a DNA-methylation assay that is not built to call variants such as MTHFR C677T. Ask the lab for a standard variant file (VCF).

Turn to: Supp. Ch. 5, Step 1. Supp. Ch. 13 §2 (crack-specific genomic considerations; phenotyping in the crack context). Supp. Ch. 12 §2 (the full panel). Compendium Protocol 06, Phenotype Assessment. Main Book Ch. 2 and Ch. 3 self-assessments.

Step 4 — Resolve your combined profile (Weeks 2–6)

Write your profile down and carry key results on a card. The Kernel notes COMT Val/Val plus DRD2 A1 is the highest-vulnerability double-deficit Warrior profile, and identifying it sets the direction of your recovery architecture.

If your result is...	What changes	Source
COMT Val/Val plus DRD2 A1	A double deficit: dopamine cleared fast and fewer D2 receptors. The rush was the first time it was ever "enough." The receptor-rebuilding stack is the highest priority, and low-intensity recovery environments will not hold you.	Supp. Ch. 13 §2
DAT1 10-repeat / DRD4 7-repeat	Faster reuptake and novelty seeking, both linked to ADHD. The clarity crack gave may have been self-medication. Ask for an ADHD evaluation, since non-stimulant treatment can address a real underlying condition.	Supp. Ch. 13 §2
MTHFR variants	5-MTHF is often transformative because the baseline deficit was partly a methylation problem. The Kernel also links methylation to respiratory lining repair. Avoid synthetic folic acid with any T variant.	Supp. Ch. 13 §§2, 4.1; Main Book Ch. 2
BDNF Met carrier	Crack's bolus delivery suppresses prefrontal BDNF more than snorted cocaine at equivalent doses. Exercise is non-negotiable and should begin immediately.	Supp. Ch. 13 §2
CYP3A4 / CYP2D6	Smoked crack largely bypasses first-pass metabolism, so inhibitors (fluconazole, grapefruit, some antibiotics) affect how long the effect lasts more than the initial rush. Interactions still matter.	Supp. Ch. 13 §2
SLC6A4	Sets the size of cocaine's serotonergic effect: the social ease and confidence. Serotonin rebuilding is part of the plan.	Supp. Ch. 12 §2, §4.3

Turn to: Supp. Ch. 5, Steps 2, 3, and 6 (gene systems, combined profiles, profile template). Supp. Ch. 13 §2. Supp. Ch. 12 §4.4 (the ADHD question). Main Book Ch. 5 and Appendix A.

Step 5 — Build the triple foundation (Day 1 to Month 6)

The Kernel applies the cocaine protocol with adjustments for the deeper depletion of the smoked route, and adds pulmonary support. Layers: methylation support; dopamine reconstruction, with a receptor-rebuilding stack as the most important structural target; NAC, which the Kernel says does triple duty in crack recovery (craving reduction, mucolytic action in the airways, and antioxidant protection); serotonin reconstruction; pulmonary antioxidant support alongside your spirometry and any pulmonary rehabilitation; and sleep repair for the severe circadian disruption of binge-crash cycles, using slow, warm audio and avoiding strong beat drops or tempo changes that can activate the arousal circuits crack primed. Recovery timelines may run longer than for powder cocaine. The dose tables are in the chapters below. Run every addition past a pharmacist and an interaction checker (Drugs.com or Medscape). The peptide layer in Supp. Ch. 13 §4.6 is labeled by the Kernel as needing physician discussion, so it is not a self-start step.

Turn to: Supp. Ch. 13 §4.1 (methylation), §4.2 (dopamine), §4.3 (serotonin), §4.4 (pulmonary recovery support), §4.5 (sleep), §4.6 (peptides, physician only). Supp. Ch. 12 §4 (the full protocol). Supp. Ch. 5, Phase One. Main Book Ch. 2, §2.4–2.5. Compendium Protocol 18 (Eating for Restoration), Protocol 17 (The Nightly Restoration), Protocol 09 (The Gut-Brain Axis), Protocol 07 (Neuroplasticity), and Centurian Paper C-32 (The Insomnia Architecture).

Step 6 — The rush memory and the cues (Weeks 1–12, then ongoing)

The craving is not for cocaine in the abstract. It is for the rush: a specific 10 to 20 second event whose memory is stored with exceptional vividness. It fires in milliseconds, often with a chest constriction, a rush of heat, or an almost-taste. The Kernel maps six triggers. The pipe or any similar object: remove it completely, and if you meet one outside, look away and leave before you think. The sound of a lighter: you cannot avoid lighters, so name it immediately, breathe, and move away, because it fires fast and fades fast. The smell of smoke, which reaches the limbic system directly and can also arise internally as a phantom smell. Places, meaning the corner, the building, the neighborhood: the Kernel says geography is one of the most powerful and least avoidable cues, so relocate if you can, and if you cannot, plan routes and schedules that avoid the highest-risk places. Money in hand, particularly the denominations tied to purchases: use automatic bill payment and direct deposit with restricted cash in early recovery, put money away when a craving fires, and stay away from supply with cash. And the bottom of the crash, the highest-risk state, which needs a support person and, if severe, medical contact.

The seven-step interrupt: move first and think second, leaving the cue before any other step; a high-intensity physical interrupt (sprints, jumping jacks, cold water on the face), because the craving fires at maximum voltage; six cycles of 4-7-8 breathing; name it clinically ("my dopamine anticipation circuit fired because of this cue; this is a conditioned signal, not a command"); your supplements; one contact; and your highest-intensity natural reward. Then document it.

Turn to: Supp. Ch. 13 §5 (the rush memory; the crack-specific triggers; the 5-minute interrupt). Compendium Protocol 05 (Digital Detox), Protocol 20 (Mapping the Terrain), Protocol 21 (Reading the Collapse), Protocol 08 (Social Environment), Protocol 33 (The Boundary Architect).

Step 7 — The Warrior's intensity architecture (Weeks 2–24)

The Kernel's frame: the engine that chased the pipe through the night is the same engine that wins anything it commits to. The chase instinct does not go away. It needs an address. Do not wait months to begin. Start in week 2, while still in the crash recovery, even with brief low-intensity movement. By month 3 the natural reward system must be generating a genuine signal, or the pull back will stay biologically compelling. The sources, in the Kernel's order: high-intensity exercise (sprints, boxing, wrestling, martial arts), where the burn of hard training is familiar territory and the rebuilding of the body and the dopamine happen together; competition with real stakes; mastery at the edge of competence; service, specifically to others in crack recovery, since lived knowledge of the pipe, the crash, the neighborhood, and the legal aftermath is something no textbook produces; and financial recovery, treated as part of the architecture, because every dollar saved and debt reduced is a genuine dopamine event.

Turn to: Supp. Ch. 13 §6 (the natural intensity architecture). Supp. Ch. 12 §6. Supp. Ch. 36 (Roots and Reversal). Supp. Ch. 3 (timeline recalibration). Centurian Paper C-28 (The Recast). Compendium Protocol 19 (The Body in Motion), Protocol 03 (Sonic Architecture), Protocol 29 (The Peacetime Paradox), Protocol 23 (Rebuilding the Ledger).

Step 8 — Medication and ADHD (from week 1)

There is no FDA-approved medication for crack or cocaine use disorder. The Kernel lists bupropion (craving evidence and depression relief; CYP2B6 slow metabolizers accumulate it, so check first); modafinil or armodafinil (wakefulness and cognition, low abuse liability); naltrexone (modest evidence, strongest in OPRM1 A118G carriers and more useful with alcohol co-use); GLP-1 agonists (emerging, called the most promising new option); and non-stimulant ADHD treatment (atomoxetine, guanfacine, viloxazine) if ADHD is confirmed, which it calls one of the most clinically impactful interventions. Discuss all of it with an addiction medicine physician.

Turn to: Supp. Ch. 13 §8.3 (medications for crack cocaine recovery). Supp. Ch. 12 §8 and §4.4 (the ADHD question). Supp. Ch. 38. Compendium Protocol 44 (GLP-1 Receptor Agonists in Recovery), Protocol 13 (The Pharma Trap).

Step 9 — Legal aid, money, identity, and the aftermath (Weeks 1–12, then years)

Many people in crack recovery are also managing probation, parole, drug court, or the effects of past incarceration, so the Kernel puts this inside recovery. Drug court is both a legal requirement and a recovery structure, and the accountability it gives can be genuinely useful. Tell your probation or parole officer about your treatment, medical appointments, and support-group attendance, which are typically viewed favorably. Ask legal aid or a public defender whether prior convictions are eligible for sentence reduction, expungement, or sealing, because state laws vary widely. Housing with a record: some cities have Fair Chance ordinances, public housing and voucher rules have their own restrictions, and recovery residences typically accept people with records. Employment with a record: many states have Ban the Box laws, and second-chance employment programs and workforce centers exist. This is not legal advice, and laws change, so verify locally.

Financial recovery is unusually concrete here: a crack binge can cost hundreds or thousands of dollars in a night, so debt, lost employment, and the economic aftermath of incarceration are among the most tangible harms to address. Identity work runs alongside. Full Inventory is a structured 180-day plan, and Amends to Self puts the person who lived through it first. Family and work follow.

Turn to: Supp. Ch. 13 §8.2 (navigating the criminal justice system in recovery) and §8.4 (community resources). Supp. Ch. 42 (Full Inventory). Supp. Ch. 43 (Amends to Self). Supp. Ch. 50 (If You're Incarcerated), if relevant. Supp. Ch. 51 (Family & Support Network Guide): give it to the people who love you. Compendium Protocol 23 (Rebuilding the Ledger), Protocol 24 (Returning to Work), Protocol 22 (The Family Field), Protocol 16 (The Isolation Spiral), Protocol 25 (The Open Door). The Kernel also names Cocaine Anonymous (which it calls Crack-Cocaine Anonymous; ca.org), SMART Recovery, local harm reduction programs, the National Reentry Resource Center, and drug court resources (nadcp.org).

Step 10 — The long game (Year 1 to Year 10)

The Kernel maps the first year of crack recovery in detail and does not project beyond it. After that, navigation shifts from repair to stewardship. Section 4 shows how. Standing tools: Supp. Ch. 44 (The Transplant: redirect the devotion and daily structure the pattern required into a practice that grows). Supp. Ch. 6 (Stay Non-Addicted) and Compendium Protocol 02 (Behavioral Addictions, with its "Mask Change" caution on addiction transfer). Compendium Protocol 13 (The Pharma Trap). Supp. Ch. 38. Supp. Ch. 5, Step 6 (a weekly AI check-in profile, a reasoning tool and never a provider). The Kernel's long-game picture: the person at six months or a year who has rebuilt their physical health, built the intensity architecture, navigated the legal aftermath, and begun service is a proof of concept for everyone still in the territory.

4. How navigation changes at Years 3, 5, and 10

Shading shows how much attention each track needs. Darkest is primary focus, then active, then maintenance. White cells with gray text are standing safeguards: low effort, never dropped. Numbers in brackets refer to the shifts listed below the table.

Track	Months 0–24 (foundation)	Year 3 (consolidate)	Year 5 (build out)	Year 10 (steward)
Safety and medical	Heart, lungs, blood count, teeth	Lung tests; medications reviewed [1]	Annual heart and lung check	Heart risk stays; no alcohol mixing [7]
Biology and genome	COMT, DRD2, DAT1; 5-MTHF base	Retest labs; step stack to upkeep [2]	Prescriber card: COMT, CYP2B6	Re-check with new meds and age
Cues, ground, cash	Pipe out; route and cash plan	Cues still fire; interrupt ready	Triggers shift: stress, old ground [5]	Same plan, rehearsed
Intensity architecture	Sprints, combat; daily intensity	Competition and craft carry the load [3]	Several intense outlets	Intensity outlets, still weekly
Sleep and mood	Crash, sleep; lungs and brain	Sleep restored; PAWS rare	Mood plan, clinician-led	Stress plan, sleep habits
Legal, money, identity	Legal map; money plan	Record work; debt, housing [4]	Financial security built	Annual re-inventory
Meaning and Manning	Purpose: first seeds only	Transplant; return to work	Manning: peer recovery guide [6]	Mentor or run a group

The seven shifts

1. **Year 3, lung tests and medication review.** The Kernel sets spirometry at baseline, 3 months, and 6 months, and says some damage is reversible and some is not, so the trajectory guides care (Supp. Ch. 13 §8.1). Keep periodic testing after the early window, and review each medication you use (bupropion, modafinil, naltrexone, ADHD treatment) with the standard in Compendium Protocol 13: is it still needed, and what marks readiness to stop?
2. **Year 3, the stack moves from building to upkeep.** The Kernel places dopamine and serotonin systems as largely normalized by months 3 to 12 (Supp. Ch. 12 §3). Retest labs (Supp. Ch. 5 Step 1a) and step down toward maintenance. The Trinity chapter says supplements are taken until stable, then tapered and resumed if the system destabilizes; Main Book Ch. 2 treats MTHFR support as maintenance, not cure. Step down to maintenance, not to zero.
3. **Year 3, competition and craft carry the load.** The Kernel says the natural reward system must be generating a genuine signal by month 3. By year 3, the Warrior architecture (Supp. Ch. 13 §6) is your ordinary week, and keeping several outlets guards against single-source fragility for a DRD2 A1 profile.

4. **Year 3, the legal and money track moves from triage to rebuilding.** Early on the work is mapping: drug court, probation, eligibility. By year 3 the work is the results: records addressed where eligible, debt reduced, stable housing and employment (Supp. Ch. 13 §8.2, Compendium Protocol 23).
5. **Year 5, triggers shift from cues to stress and old ground.** The Kernel calls place-based conditioning among the most powerful and least avoidable cues (Supp. Ch. 13 §5). As acute craving fades, what remains is stress and any return to the geography, people, or cash-in-hand situations tied to use. Keep route planning and Protocol 21 ready.
6. **Year 5, Manning.** This is the Trinity's third stage (Supp. Ch. 2). The Kernel names service to others in crack recovery as a high-value, sustained source of purpose and dopamine, because the lived knowledge of the pipe, the crash, and the legal aftermath is the most useful resource for someone still in it (Supp. Ch. 13 §6).
7. **Year 10, the heart risk does not reset the way the craving does.** Crack can cause a fatal cardiac or pulmonary event at any age, alcohol worsens it through cocaethylene, and there is no reversal agent (Supp. Ch. 13 §0; Supp. Ch. 12 §0). If a lapse ever happens, treat chest pain or breathing symptoms as an emergency, and keep annual heart and lung checks.

What is sourced and what is extrapolated. *Shifts 3, 6, and 7 rest directly on Kernel text. Shifts 1 and 2 apply Kernel rules at a timing chosen for this guide. Shifts 4 and 5 are extrapolations. The Kernel's detailed crack timeline ends at about 12 months, so years 3, 5, and 10 are projections.*

5. What outcome to expect

The short version

If you do the route above, with triage and the medical assessment first, the triple foundation, the cues and cash redesigned, the intensity architecture started early, medication and ADHD questions raised, and the legal and financial aftermath worked in parallel, this is the outcome the Kernel projects:

- **You get through the medical window and the crash.** Your heart, lungs, and blood count are checked, levamisole is caught if present, and crack lung is treated early.
- **Weeks 1 to 4 are the slow recovery.** D2 receptors measurably recover, and cravings are cue-triggered, fast, and intense. Documenting each one and using the interrupt every time is the central task.
- **By months 1 to 12, D2 recovery is significant.** Genuine pleasure returns, motivation improves, cravings are mostly cue-triggered, and identity work begins. The Kernel warns crack recovery timelines may run longer than for powder cocaine.
- **By years 3 to 5 the work is maintenance and building. By year 10 you are a steward,** carrying a small set of standing safeguards, above all the heart and lungs.

The Kernel does not promise zero risk or that a return to use cannot happen. It states that crack's cardiac and pulmonary risks are independent of age, that there is no approved medication, and that place-based cues can fire the craving for a long time.

Milestones, in order

Milestone	When	Expected outcome	Source	Basis
The immediate crash	Hours 0–4	Extreme fatigue, profound depression, overwhelming craving, shaking. Not usually medically dangerous, but check for chest or breathing symptoms. Do not use.	Supp. Ch. 13 §3.1	Clinical timeline
Hypersomnia	Hours 4–24	Overwhelming need to sleep. This is physiology, not failure.	Supp. Ch. 13 §3.1	Kernel projection
The vulnerable window	Days 2–7	Receptors still downregulated, anhedonia, and cues fire the rush memory at full intensity. Supplement protocol and exercise begin. Cue redesign is the key intervention.	Supp. Ch. 13 §3.1	Kernel projection
Medical baselines	Week 1, then 1, 3, 6 months	Spirometry, ECG, and a blood count for levamisole, with repeat tests. Some lung damage is reversible.	Supp. Ch. 13 §§3.2, 8.1	Kernel projection
The slow recovery	Weeks 1–4	D2 density measurably recovering. Gradual improvement with daily variability. Fast, intense cue-triggered cravings.	Supp. Ch. 13 §3.1	Kernel projection
Significant D2 recovery	Months 1–12	Episodic, mostly cue-triggered cravings. Genuine pleasure returning. Motivation improving. Identity work begins.	Supp. Ch. 13 §3.1	Kernel projection
Deep-root reversal	2–5+ years	Prefrontal recovery and epigenetic reversal continue. Some changes may be partial.	Supp. Ch. 36	Kernel projection
Steward phase	Years 3–10	Repair tracks at maintenance. Legal and money track largely rebuilt. Service. Standing safeguards, including heart and lung checks.	Section 4 of this guide	Extrapolated

The Kernel's 12-month numbers: nearest analog only

The Kernel has no crack-specific case study and gives no crack-specific projection. The nearest profile in Supplemental Chapter 2 is Case 04, a 34-year-old startup CEO using powder cocaine Tuesday through Sunday (COMT Val/Val, likely DRD2 A1). The Kernel notes that Warrior profile has its best projected outcome when the environment is redesigned first, which is the crack chapter's own emphasis. Treat these as analogs, not predictions for smoked crack.

Case	Measure	Kernel protocol	Standard treatment
Case 04	Sustained abstinence or cessation at 12 months	65%	20%

Case	Measure	Kernel protocol	Standard treatment
Case 04	Significant mood and motivation improvement at Month 3	78%	25%
Case 04	Exercise protocol adherence (the key mediator)	72%	30%
Case 04	Craving reduction of 60% or more with the full dopamine stack	68%	15%

How to read these numbers. *The Kernel describes them as archetype projections, "probability estimates" for an adherent, biologically confirmed 12-month protocol, drawn from cited studies and NIDA baselines. They are not guarantees, and the Main Book states that it is not reporting a randomized controlled trial of the Kernel itself. Case 04 is a powder-cocaine profile and its protocol includes bupropion with a prescriber, so the result is not supplements alone.*

What changes the outcome

- **Ignoring chest pain or breathing symptoms.** Cardiac and pulmonary emergencies do not wait to see if they pass.
- **Mixing with alcohol or opioids.** Cocaethylene, masked sedation, and fentanyl in the supply.
- **Skipping the medical baselines,** including spirometry, ECG, and the levamisole blood count.
- **Leaving the pipe, the corner, or the cash in place.** These are among the most powerful cues, and geography is the least avoidable.
- **Staying alone through the crash.** The bottom of the crash is the highest-risk craving state.
- **A low-intensity recovery for a Warrior.** Gentle-only plans fail by understimulation. The intensity architecture should start by week 2.
- **Untreated ADHD** when crack was serving as the focus drug.
- **Ignoring the legal and financial aftermath.** Records, housing, and debt are barriers to identity and stability. Address them with legal aid and reentry resources.
- **A lapse.** The Kernel treats it as information, not judgment (Protocol 21). It is also a cardiac and pulmonary risk event: do not use alone, do not add alcohol, keep naloxone, and call 911 for chest pain or breathing trouble.

How to read the evidence behind the outcomes

The Main Book marks claims with an Evidence Tier: Established, Probable, Emerging, Author/System Experience, and Controversial or Mixed. This guide's reading: crack's cardiac risk, the cocaethylene interaction, levamisole-related agranulocytosis, and the pulmonary complications are documented clinical concerns. The Kernel itself states there is no FDA-approved medication, rates bupropion and naltrexone as modest evidence, and GLP-1 agonists as emerging. It calls NAC the strongest-evidence supplement in its stack. The rest of the supplement stack, the peptide layer, the pulmonary supplement claims, the percentage analogs, and the years 3 to 10 trajectory sit lower on that scale, so bring them to your clinician as questions, not as facts. The legal information is general and varies by state.

Take these to your clinician

- An honest account of your use: how often, how many hits in a binge, for how long, and whether alcohol or opioids were involved. The Kernel says this is what lets a provider give you real care.
- Any cough, shortness of breath, or blood in sputum, plus any chest symptoms during use, so spirometry, imaging, ECG, and an echocardiogram can be arranged.
- A request for a complete blood count now and at 1 and 3 months for levamisole, a dental evaluation, and a nutritional assessment.
- Your COMT, DAT1, DRD2, MTHFR, and CYP results, and any ADHD symptoms so an evaluation can be arranged.
- A direct question about bupropion, modafinil or armodafinil, naltrexone, GLP-1 agonists, and non-stimulant ADHD treatment, and naloxone for you and everyone in your home.